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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,253

04/02/2004

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2705-0737

1787

73552

7590

04/17/2008

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EXAMINER

CHU, WUTCHUNG

ART UNIT

PAPER NUMBER

2619

MAIL DATE

DELIVERY MODE

04/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,253	Applicant(s) CHELLAPPA ET AL.	
	Examiner WUTCHUNG CHU	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-66 is/are pending in the application.
- 4a) Of the above claim(s) 35-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 53-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/7/2008; 4/10/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is in response to application's amendment filed on 1/7/2008. Claims 35-66 are pending and claims 1-34 are canceled.

Election/Restrictions

2. Newly submitted claims 35-52 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- I. Claims 35-38 are drawn to inserting an information element associated with the signaling message, the predefined information element type being one designated under the protocol to specify which standard and proprietary capabilities are supported by at least one node along the signaling path, which is classified in class 370, subclass 384.
- II. Claims 39-52 are drawn to routing information for the remotely-computed virtual circuit to determine whether links that are within intermediary node's flooding group, which is classified in class 370, subclass 432.

The inventions are distinct, each from the other because of the following reasons:

Invention I and II distinct from the invention originally claimed for the following reasons:

The original claims are drawn toward routing a call with service request and attribute, and selecting routing path with conformed service request which is classified in class 370, subclass 395.21, whereas the above two groups I and II are distinct from the original presentation, and are classified into different subclasses.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 35-52 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 53-55, 57-58, 60-61, and 64-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Bertin et al., hereinafter Bertin, (US6934249).

Regarding claims 53, Bertin discloses method and system for minimizing the connection set up time in high speed packet switching networks (**see column 5 line 45-60**) comprising:

- receiving a service request at a node (**see col. 6 line 9 connection request**) related to a call wherein said service request comprises a general application transport information (**see col. 12 lines 17-31**) element of a private network to network interface signaling setup message (**see col. 7 line 42 and col. 12 line 10**);
- accessing the information element (**see column 7 line 9-13**);

- determining if the information element comprises a preferential attribute parameter of a link or node, or combinations thereof **(see col. 12 lines 11-14)**;
- extracting information from a database stored on the node related to a network link or node, or combinations thereof wherein the information comprises one or more supplemental attributes and wherein the supplemental attributes provide link or nodal characteristic information supplemental to one or more topology state parameters used to process a routing protocol **(see col. 12 lines 15-18)**;
- comparing the preferential attribute parameter with the one or more supplemental attributes **(see col. 12 lines 18-27)**;
- generating a subset of preferred network links or nodes, or combinations thereof, from a set of network links or nodes, or combinations thereof, available for routing the call, wherein generating comprises excluding from the subset any network links or nodes, or combinations thereof, comprising one or more supplemental attributes that do not conform with the preferential attribute parameter **(see col. 12 lines 15-26)**;
- performing the routing protocol to determine one or more routing paths comprising network links or nodes, or combinations thereof from the subset, wherein the protocol is based at least in part on at least one topology state parameter of the subset links or nodes or combinations thereof **(see col. 12 lines 15-17)**;
- selecting a routing path from the one or more routing paths **(see col. 12 lines 1-11)**; and

- routing the call via the selected routing path (**see col. 12 lines 39-42**).

Regarding claims 54, Bertin teaches the supplemental attributes relate to private network to network interface topology or policy characteristics, or combinations thereof (**see column 12 lines 52-67**).

Regarding claims 55, Bertin teaches the supplemental attribute is related to: a capability of a link (**see col. 12 lines 9-13**), a characteristic of a node comprising a link (**see col. 12 lines 64-67**), or a peer group (**see col. 12 lines 17-31**) policy or combinations thereof (**see col. 12 lines 9-17 and col. 9 lines 1-8**).

Regarding claims 57, Bertin teaches the preferential attribute parameter specifies that a public link or a private link is preferred and wherein the supplemental attribute identifies whether a link is a public link or a private link (**see col. 7 lines 1-2 and col. 40 liens 58 and col. 14 lines 27-40**).

Regarding claims 58, Bertin teaches the preferential attribute parameter specifies that an encrypted link or an unencrypted link is preferred and wherein the supplemental attribute identifies whether a link is encrypted (**see col. 40 lien 58**) or unencrypted (**see col. 14 lines 27-40**).

Regarding claims 60, Bertin teaches the preferential attribute parameter is related to: a capability of a link, a characteristic of a node comprising a link, or a peer group policy or combinations thereof (**see column 9 line 1-8**).

Regarding claims 61, Bertin teaches the preferential attribute parameter is selected from the group consisting of:

- a characteristic relating to type (**see column 9 line 1-3**);
- a characteristic relating to encryption (**see column 14 line 27-40**);
- a characteristic relating to basing (**see column 40 line 58**);
- a characteristic relating to public nature (**see column 40 line 58**);
- a characteristic relating to quality of service (QoS) capability (**see column 12 line 17-31**);
- a characteristic relating to the link comprising a virtual trunk (**see column 16 line 46-47**); and
- a color assigned to that route (**see column 18 line 5-6**).

Regarding claims 64, Bertin teaches the supplemental attributes are communicated to the database via a system capability information group of a private network to network interface link or nodal topology state element (**see col. 9 lines 51-56**).

Regarding claims 65, Bertin teaches the one or more topology state parameters provide link or nodal characteristic information that is different than the characteristic information provided by the supplemental attributes (**see col. 9 lines 51-56**).

Regarding claims 66, Bertin teaches the routing protocol is processed independent of the one or more supplemental attributes (**see col. 7 line 65—col. 8 line 17**).

Claim Rejections - 35 USC § 103

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bertin in view of El-Rafie (US6968394).

Regarding claims 56, Bertin disclose all the subject matter of the claimed invention with the exception of

- the preferential attribute parameter specifies that a satellite link or a terrestrial link is preferred and wherein the supplemental attribute identifies whether a link is a satellite link or a terrestrial link.

El-Rafie from the same or similar fields of endeavor teaches the use

Determines what the optimum return path to the asymmetric and/or corporate user

would be i.e., either satellite or via direct terrestrial **(see El-Rafie col. 14 lines24-26)**.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the determination of optimum return path of either satellite or direct terrestrial as taught by El-Rafie in system for minimizing the connection set up time in high speed packet switching networks of Bertin in order to enhance system efficiency.

8. Claim 59 and 62-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertin in view of Rochberger et al., hereinafter Rochberger, (US6473408).

Regarding claims 59 and 62-63, Bertin disclose all the subject matter of the claimed invention with the exception of:

- (claim 59) the protocol is a shortest path first routing protocol or an on-demand routing protocol, or combinations thereof.
- (claim 62) providing an application identification within the general application transport information element of the service request wherein such application identification enables flooding of the service request regardless of whether the node is configured to access or understand the information element comprising the preferential attribute parameter.
- (claim 63) application identification comprises an organization unique identifier.

Rochberger from the same or similar fields of endeavor teaches the use of:

- PNNI routing protocol (**see Rochberger col. 8 lines 56-64**);
- Identity and peer group membership and group ID (as corresponds to application identification and organization unique identifier (**see Rochberger col. 9 line 57 – col. 10 line 45**)).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the PNNI routing protocol and Identity and peer group membership and group ID as taught by Rochberger in system for minimizing the connection set up time in high speed packet switching networks of Bertin in order to enhance system efficiency and permits peer groups with large numbers of nodes and links to be represented in a simple fashion (**see Rochberger col. 6 lines 16-17**).

Response to Arguments

9. Applicant's arguments filed 1/7/2008 have been fully considered but they are not persuasive.

With regard to applicant's remark for claim 53 (page 11), applicant submits that the Bertin at least does not teach, determining if an information element comprises a preferential attribute parameter of a link or node, or combinations thereof and comparing the preferential attribute parameter to a supplemental attribute related to a characteristic of a network link and/or node.

Bertin discloses connection set up and path selection in col. 12 where parameters are specified by user with a connection request and path calculation in col. 13, collects all the input information and calculates first the Equivalent capacity of the new network connection. Then potential paths through the network from the origin to the destination node(s) are calculated. The topology database is used to determine the suitability of links for the potential path. Which illustrate a comparison of which link is suitable for routing a specific call connection, and thus meets the limitation and rejection respectfully remains.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barri et al. US2003/0081608

Hatley; 6654701

Blair; US6778495

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WUTCHUNG CHU whose telephone number is (571)270-1411. The examiner can normally be reached on Monday - Friday 1000 - 1500EST.

Art Unit: 2619

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571 272 7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WC/
Wutchung Chu

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619